

Conclusions: With the large-scale population use of aspirin for cardiovascular prophylaxis and other benefits, the potential risks to hearing health should be considered, particularly given that the effects may be reversible or improved with altered dosing. With the increasing prevalence of hearing loss in all age groups and segments of the population, attention to widespread exposures of risk may help preserve hearing-related health.

Value of Endoscopy in Surgical Procedures to Stapedial Region

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Objectives: Evaluate the role of endoscopic approaches during exclusive or combined (microscopic and endoscopic) procedures to stapedial region, particularly in difficult cases or in anatomic abnormalities.

Methods: From 2009 to 2014, 56 endoscopic exclusive or combined (microscopic and endoscopic) approaches to the stapedial region were performed at the otolaryngology department, University Hospital of Modena. Operations performed were stapedoplasties or explorative tympanotomies for conductive hearing loss. Video, patient charts, and operative reports from surgeries were reviewed in February 2014. Cases in which stapedial abnormalities were identified were included and analyzed in the present study.

Results: In 8 cases a malformed stapes was identified. Of those, 6 were eventually treated, while in 2 cases, after a diagnosis was made, a conservative attitude was chosen. Under endoscopic view, precise procedures under direct view were made possible, even in very delicate and hidden regions.

Conclusions: Whether chosen as a pure explorative tool, or as the main operatory visualization modality, endoscopy can guarantee very good visualization of the stapedial region, and may help in diagnosing and fixing altered stapedial conditions.

Vestibular Dysfunction in Patients with Enlarged Vestibular Aqueduct

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Objectives: Enlarged vestibular aqueduct (EVA) is the most common inner ear malformation. While a strong correlative relationship between EVA and hearing loss exists, its association with vestibular dysfunction is less well established. In this study, we characterize the vestibular phenotype in patients with EVA.

Methods: This was a prospective, cross-sectional study of 106 patients with unilateral (n = 26) or bilateral (n = 80) EVA, defined as a midpoint diameter greater than 1.5 mm, who were referred or self-referred to participate in a study of the clinical and molecular analysis of EVA at the National Institutes of

Health. We obtained a clinical history focused on vestibular dysfunction, and specifically asked about age of independent walking, history of vertigo, head tilt with vomiting, and clumsiness. Based on tolerance and availability, participants underwent videonystagmography (VNG), cervical vestibular evoked myogenic potentials (cVEMP), and rotary vestibular chair testing (RVT) to objectively assess their vestibular function.

Results: Forty-five percent of patients with EVA reported vestibular symptoms. A total of 44% (28 out of 66) of those completing VNG testing had abnormal results, as defined by abnormalities in caloric, ocular motor, and positional testing. An increased number of vestibular symptoms is correlated with the presence of bilateral (rather than unilateral) EVA ($P = .008$) and a history of head injury ($P < .001$). Abnormal VNG results also correlated with a history of head injury ($P = .01$).

Conclusions: Vestibular dysfunction is common in patients with EVA. To our knowledge, this is one of the largest prospective EVA studies which specifically address the vestibular manifestations.

Vestibular Testing Data in Migraine-Associated Vertigo

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Objectives: (1) Describe data on comprehensive vestibular testing in migraine-associated vertigo patients. (2) Delineate specific findings in vestibular testing that can assist in the diagnosis and treatment of migraine-associated vertigo.

Methods: A retrospective case review of individuals diagnosed with migraine-associated vertigo after evaluation by an otologist, a neurologist, and who had vestibular testing between January 1, 2010, and June 31, 2012, at a tertiary referral center. Videonystagmography (VNG), sinusoidal harmonic acceleration (SHA) testing, and cervical vestibular evoked myogenic potential (cVEMP) testing were analyzed.

Results: Eighty-three patients met inclusion criteria; 63 had a diagnosis of primary migraine-associated vertigo. An additional 20 patients had a secondary diagnosis including Ménière's disease, intracranial hypertension, and a history of cranial surgery (secondary migraine-associated vertigo). The average patient was 49 years old, with 82% being female. There was no statistically significant difference between the 2 groups. Overall, 30% of migraine-associated vertigo patients had abnormal caloric testing with a 60% average unilateral weakness. The unilateral weakness was to the right 77% of the time. When VNG, SHA, and cVEMP testing were combined, 24 patients (29%) had an identifiable vestibular weakness; 75% had a peripheral source and 25% had central vestibular findings. A total of 50% of patients with a peripheral weakness were fully compensated, 33% were partially compensated, and 17% were poorly compensated.

Conclusions: In patients with primary and secondary migraine-associated vertigo, approximately two-thirds of patients were